

# NOVEL GLUCOSE TRANSPORTER/SENSOR PROTEIN AND USES THEREOF

## Abstract of the Disclosure

5 The present invention provides a method for determining whether a subject has a defect in cell proliferation. The present invention further provides a method for assessing the efficacy of therapy to treat a defect in cell proliferation in a subject who has undergone or is undergoing treatment for a defect in cell proliferation. Also provided by the present invention is a method  
10 for assessing the prognosis of a subject who has a defect in cell proliferation. Additionally, the present invention provides a method for treating a defect in cell proliferation in a subject in need of treatment thereof by inhibiting GLUTx. The present invention also provides methods for treating ischemia in a subject in need of treatment thereof. Finally, the present invention provides a method  
15 for treating infertility in a subject in need of treatment thereof.